

STATE OF ALASKA

R.C.A.  
RECEIVED

06 NOV 27 PM 2:11

REGULATORY COMMISSION OF ALASKA

Before Commissioners:

Kate Giard, Chairman  
Dave Harbour  
Mark K. Johnson  
Anthony A. Price  
Janis W. Wilson

In the Matter of the Consideration of Adoption of )  
Regulations to Implement Amendments to the )  
Public Utilities Regulatory Policies Act of 1978 )  
By the Energy Policy Act of 2005 )

R-06-5

**REPLY COMMENTS OF THE MUNICIPALITY OF ANCHORAGE**

**D/B/A MUNICIPAL LIGHT AND POWER**

Reply to the Comments of James Rose, Network for New Energy Choices

Although he doesn't mean to, James Rose makes a persuasive case against net metering. Without any discussion or basis at all, Mr. Rose asserts that net metering provides, among unspecified other benefits, lower peak demand for electricity, better public health, more jobs, and economic growth. What the balance of Mr. Rose's comments actually shows, however, is that if enough money is spent on subsidies, some amount of the subsidized activity can be induced.

Most of Mr. Rose's comments are devoted to a discussion of the net metering program in New Jersey, and the success he attributes to that program. On page two of his comments, he describes that success as follows:

Early results indicate that New Jersey is experiencing a tremendous rate of growth in both customer participation and the cumulative capacity of installed renewable energy systems. In 2004, the first year

1 under New Jersey's restructured net metering program, the number of  
2 net metering customers in the states [sic] increased from zero to more  
3 than 300. Since then, the number of solar panels in New Jersey had  
4 [sic] increased more than fivefold to 1665 (P. 2)

5 If Alaska were to experience the same level of success, on a per capita basis, it would have  
6 nearly 23 participants in the first year of its program, and in the ensuing two years, the  
7 number of solar panels would grow to nearly 127 (It is not clear whether, in the paragraph  
8 quoted above, there is a one to one relationship between net metering customers and solar  
9 panels). Mr. Rose gives no indication of the number of watts that would be associated  
10 with these participants and solar panels.

11 Given the very generous incentives offered to participants in the New Jersey program, this  
12 would seem like a modest success if subsidized photovoltaic generation were a good thing,  
13 but there is no evidence in Mr. Rose's comments that it is. The comments are completely  
14 silent as to the actual level of benefit achieved, or even the definition of the benefit. They  
15 are also almost completely silent as to the level of resources expended to achieve whatever  
16 benefit was achieved.

17 What little cost information is given in Mr. Rose's comments indicates that New Jersey is  
18 willing to pay a lot. The state appears to have arbitrarily decided that by 2008, 20% of the  
19 energy it consumes should be obtained from renewable resources. Mr. Rose does not say  
20 whether this refers to all of the energy New Jersey consumes, or just electric, but  
21 considering the magnitude of the non-electric energy consumed in an industrial state like  
22 New Jersey, and the difficulty of obtaining any significant part of that energy from  
23 renewable sources, it seems fairly safe to assume that the goal refers to electric energy.  
24 The state seems to have then designed a program of incentives intended to pay (or rather,  
25 to force utility customers to pay) whatever it takes to cause the installation of large  
26 amounts of renewable generation. It would be interesting to know how much progress

1 New Jersey has made towards meeting its five year 20% goal during the first three years of  
2 this program.

3 A list of the incentives listed in Mr. Rose's comments includes the following:

- 4 1. Automatic net metering for systems up to 2 MW. This would exceed the peak  
5 demand of all but a handful of retail customers in Alaska. It is worth mentioning  
6 that, according to Mr. Rose, the state task force designing the legislation solicited  
7 the input of utilities, but adopted their recommendations only if they did not  
8 "compromise" the predetermined goal of expanding the state's distributed  
9 generation "market". (It is possible to characterize almost any system of commerce  
10 as a market, but New Jersey's distributed generation market is obviously far from  
11 competitive).

12 For some reason, the law makes net metering available only to residential and small  
13 commercial customers. This arbitrary (and surprising, given the apparent goals of  
14 the legislation) limitation necessitates an equally arbitrary definition of "small  
15 commercial". From Mr. Rose's statement that the rule adopted allows "[s]ystems  
16 up to 2 MW in size to qualify as small commercial customers." (P.5), it is  
17 impossible to know whether the limitation applies to peak demand of the customer,  
18 some other measure of electric consumption, the peak output of the generation  
19 system, or some other measure of the electric output of the generation system.  
20 Presumably, the reason that there is any size limitation at all is that the state  
21 recognizes that net metering is not really an accurate way to measure the product of  
22 customer owned distributed generation, and has decided that above 2 MW, there is  
23 sufficient scale to justify the expense of explicit metering of the output.

- 24 2. Each electric utility is required to "include 22.5% renewable energy in its electricity  
25 mix by 2021." (P.5). Again, it is impossible from reading Mr. Rose's comments to  
26 know the exact meaning of the requirement, but by any cognizable standard, it

1 would require utilities to acquire a lot of renewable energy. Utilities are permitted  
2 to meet this requirement by purchasing renewable energy certificates ("RECs"),  
3 which are issued to renewable generators, thus creating a subsidy market for  
4 renewable generation. Whatever subsidy can be realized through the sale of these  
5 RECs is therefore added to the subsidies gained directly through net metering.  
6 Clearly, the subsidies could turn out to be very large if utilities have trouble  
7 meeting their 22.5% renewable requirement (however it is defined), and could drop  
8 to nothing once the utilities have all met the requirement.

9 An inexplicable quirk in the law regarding RECs is that, apparently, utilities can  
10 purchase them only from customers who are eligible for net metering. Again, we  
11 are left wondering why, if subsidies for renewable energy are a good thing, they  
12 would not be a good thing for all potential renewable developers. Of course, it is  
13 possible that the purpose of the law is not to encourage renewable energy  
14 production, but instead, to encourage distributed generation, and not just any  
15 distributed generation, but specifically distributed generation owned by residential  
16 and "small commercial" customers of electric utilities. ML&P hopes that if Alaska  
17 adopts any standards related to net metering, they will be supported by policies that  
18 are more capable of rational comprehension.

- 19 3. Unspecified "Societal Benefits Charge" distribution. The State collects a "Societal  
20 Benefits Charge" from all public (presumably electric) utility customers and  
21 distributes the revenue as a premium on each "kilowatt of electricity" generated  
22 renewably. Again, for reasons that appear to be unrelated to any desire to  
23 encourage renewable energy, the formula for the premium distributions is  
24 apparently a declining (at least in slope) function of quantity of generation, thus  
25 suppressing any benefits that a developer might realize through economies of scale.
- 26 4. "Streamlined" application process. New Jersey has rules limiting the complexity of  
application that a net metering customer can face, and requiring utilities to approve

1 or reject applications within 20 days of receipt. It is not possible to know from Mr.  
2 Rose's comments whether this is a subsidy or not. To the extent that it imposes  
3 unreasonable burdens on utilities, it is a subsidy. To the extent that it protects  
4 customers from unreasonable delaying tactics by utilities, it is a fair trade practices  
5 requirement.

6 5. "Simplified" interconnection standards. Like number 4 above, this is not clearly a  
7 subsidy, but might be. ML&P accepts, and believes that most of Alaska's utilities  
8 accept, that customer (and small generator) interconnection requirements should be  
9 as simple, and as accessible as reasonably possible. However, there is a legitimate  
10 reason for interconnection standards, and ML&P hopes that as the Commission  
11 considers standards relating to interconnection, it will not lose sight of the  
12 importance of protecting the public, including both the utilities and their customers,  
13 from the potential evils of insufficiently controlled distributed generation. ML&P  
14 is particularly concerned about the statement on page 8 of Mr. Rose's comments  
15 that New Jersey's standards do not require the customer to purchase additional  
16 insurance. The statement is a little vague, but ML&P would point out that 2  
17 megawatts is about 2,800 horsepower, and in electric form, is capable of doing a lot  
18 of harm very quickly. It is worth considering carefully what evidence of financial  
19 responsibility a person connecting 2,800 horsepower to the grid should be required  
20 to show.

21 6. Reduced "unnecessary" safety requirements. Mr. Rose tells us that utilities are  
22 prohibited from requiring, apparently among other things, external disconnect  
23 switches. This prohibition appears amazingly irresponsible to ML&P.

24 7. "Monthly Banking of Excess Generation" The existence of this concept helps to  
25 illustrate why net metering must be regarded as a subsidy program. According to  
26 Mr. Rose, the utility grid acts as an "energy bank" for the net metering customer.  
When the customer produces more energy than he/she requires, the grid takes it in

and stores it until such time as the customer wants it. This is not a bank, in the financial sense, it is a storage service.

Energy storage is expensive, and electric energy storage is, for all practical purposes, impossible. All commercial electric energy storage technologies actually convert the electric energy to some other form for storage, and then reconvert it to electric energy when it is used. The most common storage technologies today are probably batteries, which are very expensive, and practical only for relatively limited amounts of energy storage (consider Golden Valley Electric Association's Battery Energy Storage System, for example), and pumped hydro, which is relatively inexpensive to add as a capability to some hydroelectric facilities, but quite inefficient. Utilities have tried other technologies (e.g. compressed air in conjunction with combustion turbines) which mainly demonstrate, by the difficulty and cost of the techniques used, how serious the problem of energy storage can be.

There is a certain amount of storage inherent in most of the conventional generation technologies used by utilities. Fuel burning technologies store energy as fuel until needed. Most hydroelectric facilities have some limited (in some cases, quite large, in other cases very limited) ability to store water until the energy is needed. Non-hydro renewable technologies, on the other hand, generally have no storage at all, and worse, in many cases are not even predictable. As the renewable component of the electric energy generation mix increases, storage will become more and more scarce, and therefore, more and more valuable.

So, when Mr. Rose asserts that for net metering to work, customers must have monthly banking of excess generation, he is really saying that utilities must provide a costly service free of charge. This is an obvious subsidy.

Apparently, New Jersey goes beyond banking, and for the first 12 months of a customer's participation, requires the utility to actually purchase the customer's

1 excess output at retail prices (i.e. at the retail rate that the customer would pay for  
2 the same output if taking it as service from the utility). Recognizing that this is a  
3 subsidy, however, New Jersey allows the utility purchase rate to revert to the  
4 traditional avoided cost rate after the initial 12 month period. Mr. Rose sees this as  
a defect in New Jersey's program, apparently believing that utilities should be  
required to pay multiples of its actual value for net metered energy forever.

### 5 **Confusion of Purposes**

6 On pages 12 and 13 of his comments, Mr. Rose discusses the issue of how inclusive the  
7 definition of eligible technologies should be. This discussion illustrates a confusion that  
8 ML&P suspects is widespread regarding the purposes of net metering. From Mr. Rose's  
9 description of the program, it appears that New Jersey has explicitly tied net metering to  
10 renewable technology. There is nothing, however, about renewable energy that makes it  
11 particularly appropriate for net metering, and there is nothing about net metering that  
12 makes it particularly appropriate for renewable energy. It could be that net metering is  
13 desirable but not subsidized renewable energy, it could be that subsidized renewable  
14 energy is desirable but not net metering, it could be that both are desirable, or it could be  
15 that neither is desirable.

16 As ML&P pointed out in its October 23, 2006 comments, it would be wise to examine the  
17 purposes that might justify each program, and be clear on how the program actually relates  
18 to the purposes. One possible purpose the Commission might consider would be to  
19 encourage renewable energy production. That is not among the purposes listed in 16  
20 U.S.C. Chapter 46, but arguments could be made that it is desirable. If that is the purpose,  
21 it could be advanced more efficiently by simply offering a subsidy to renewable energy  
22 production, or, better yet, imposing an externality tax on the external harms that renewable  
23 energy production is supposed to avoid.<sup>1</sup>

---

24 <sup>1</sup> The imposition of a tax on externalities is obviously not within the authority of the Commission, so this is  
25 really a statement that dealing with the externalities associated with fuel burning is not really the

On the other hand, it could be that the purpose is to induce the proliferation of customer owned power production plants. If that is the purpose (also not one of the purposes listed in 16 U.S.C. Chapter 46), it would be better achieved if the eligible participants were not limited to renewable energy production, since some cost effective small power producers, cogenerators and backup power plants, for example, might not qualify.

If we want to encourage both kinds of activity, we should offer incentives relevant to each. If we want to encourage one activity but not the other, we should offer only the incentives relevant to that activity. What we should not do is use a desire to encourage one kind of activity (renewable energy, for example) as an excuse to offer an uneconomic incentive for the other. They are not related.

### "Unwarranted Utility Concerns"

On page 13 of his comments, Mr. Rose introduces an argument that utilities throw up obstacles to net metering because they "[p]erceive net metering programs as revenue-losers rather than demand-reduction strategies,...". ML&P does not understand why the two concepts would be in conflict. It would seem that a program could be both a revenue loser and a demand reduction strategy. Net metering in Alaska, however, is unlikely to be either a revenue loser or a demand reduction strategy. It will not be a revenue loser because the utilities will simply recover the revenue not recovered from net metering participants from the other customers. As envisioned by Mr. Rose, it will probably not be a demand reduction strategy (at least not an effective one) because the renewable energy production technologies he envisions would be unlikely to produce significant energy during all of the peak demand hours.

---

Commission's responsibility. It is the responsibility of state and federal legislatures, and of state and federal environmental protection agencies. If, for some reason, it is decided that electric consumers have a special obligation to mitigate the external effects of fuel burning for electric generation, the efficient response would be an externality surcharge on electric energy consumption, which could be tied to the amount of fuel burned to supply the electric energy. The surcharge revenue could be used to fund a renewable energy subsidy program, or an energy efficiency subsidy program, or some combination of the two.

REPLY COMMENTS OF THE MUNICIPALITY OF ANCHORAGE  
D/B/A MUNICIPAL LIGHT AND POWER  
Docket U-06-5  
Page 8 of 17



1 The case against photovoltaic panels in this respect is pretty obvious. Most Alaskan  
2 utilities experience their peak demands during hours when the sun is either below the  
3 horizon or so close to it as to produce very little electric energy, at least from a fixed panel.

4 The case against customer owned wind power is a little less obvious, but in general, our  
5 customers do not live or maintain their businesses in the locations of best wind resource,  
6 and even if they did, the resource would lack the diversity necessary to make it useful as  
7 capacity. However, regardless of whether net metering would reduce the capacity  
8 requirements of utilities, the point that ML&P would stress is that the utilities have no  
9 revenue based interest in opposing it. The utilities will get the revenue they need with or  
10 without net metering. Therefore, the Commission should be confident that when Alaska's  
11 utilities offer objections to net metering, those objections are rooted not in a desire to  
12 protect the utilities' revenue, but rather in a desire to protect their customers from the harm  
13 that would flow from an ill conceived regulatory requirement to pay far more for the  
14 output of uncontrolled small power producers than that output would be worth.

15 Mr. Rose claims on page 14 of his comments that to compensate net metering customers  
16 for their output at less than the retail rate would subsidize the non-participating customers  
17 at the expense of the net metering customers. ML&P will argue in its reply below to the  
18 comments of Peter McKay that the retail price of goods is generally higher than the  
19 wholesale price because of the cost of the various services that are required to make the  
20 goods actually available and useful to retail customers. In fact, the retail value of the  
21 output of the intermittent resources which Mr. Rose seems to be advocating is close to  
22 zero, because the output is so unreliable that no consumer could commit to relying on that  
23 output for any important purpose. Therefore, the only way that the output will have any  
24 value is if the utility combines it with other sources of power (sources that are, unlike the  
25 net metered power, controllable), adds other services to it, and distributes it to customers  
26 that intend to use it in the moment that it is produced. All of these services are costly.

1 Mr. Rose argues, also on page 14, that renewable power tends to be produced on peak, and  
2 is therefore actually worth *more* than the average retail value of energy. In some cases (not  
3 likely in Alaska, but conceivable) this may be true, and in such cases, the power producer  
4 should be paid appropriately for the value of the output. That is what avoided cost  
5 determinations are all about. No one, however, should be tempted to believe that the  
6 studies to which Mr. Rose vaguely refers ("Empirical studies demonstrate that renewable  
7 energy systems (particularly solar PV systems) generate excess electricity *during* peak  
8 demand periods." P14, emphasis in original) have any relevance to Alaska. It is likely that  
9 in, for example, Arizona, where solar power might actually make sense, such systems  
10 actually do produce their maximum output during the period of peak air conditioning load.  
11 In Alaska, on the other hand, peak demands occur during the winter months, and they are  
12 not driven by air conditioning. They are also not likely to be mitigated much by solar  
13 power. In any case, there is no reason at all to believe that compensation at a price that  
14 includes the cost of expensive additional services will accidentally equal the real value of  
15 the net metered output.

16 Mr. Rose argues that any cross-subsidy caused by net metering can be eliminated by  
17 unbundling, and in this, he is right. If the utilities' rates are *sufficiently* unbundled, net  
18 metering of energy can be made to appropriately compensate the producer. However, to  
19 do this, there would have to be unbundled charges for distribution, transmission, power  
20 management, backup capacity, planning reserve, operating reserve (spinning and non-  
21 spinning), frequency control, voltage control, and, probably, a time of use variable. Some  
22 utilities in the lower 48 probably come close to unbundling to that extent, and ML&P is  
23 aware of at least one Alaskan utility that is interested in unbundling to a considerable  
24 extent. However, unbundling is not a costless activity, and the Commission should be  
25 wary of requiring any program or service that would require utilities to fully unbundle their  
26 rates prior to a very serious determination of the likely costs and benefits of such a project.

Conclusion on Reply to Comments of James Rose

Mr. Rose has described, at some length, a massive subsidy program in the State of New Jersey that does not appear to be designed to efficiently accomplish any rational objective. This program subsidizes both small customer owned generation, through net metering, and certain forms of renewable power production through both explicit subsidies and exclusive access to the net metering program. Mr. Rose seems to take for granted that these massive subsidies are a self-evidently good thing, but he has not described any benefit that has been achieved, he has not explained why the rather perplexing New Jersey program is the best way to achieve any particular benefit, and he has not described any benefit that the subsidies are intended to achieve. ML&P urges the Commission to hold fast to the principle that regulatory actions, particularly actions requiring large subsidies, must be justified by explicitly stated and accepted regulatory purposes.

Reply to the Comments of Peter McKay

Mr. McKay's comments illustrate most of the common public misconceptions relating to net metering. Following is a list of those misconceptions and ML&P's response to them:

1. **"What is net metering?"** "[T]his provides the customer with full retail value for all the electricity produced" (first page of Mr. McKay's letter)

Implied in this statement is the belief that the customer *should* be provided with full retail value for all the "electricity"<sup>2</sup> produced. This is the fundamental misconception. There is a tendency among proponents of net metering to speak of electric power (in these comments, the phrase "electric power" will be used to mean capacity and associated energy, along with all of the physical attributes necessary for the electric distribution system to function) as if it were a commodity, like wheat. Of course, electric power is not

---

<sup>2</sup> Enclosed in quotation marks because "electricity" is a word that in general usage could mean many things. It could mean electric energy (kilowatt-hours), electric potential (volts), electric current (amperes), electric power (kilowatts), or any combination of the above.

1 a commodity, it is a process. Unlike wheat, it cannot be stored, and worse, it cannot even  
2 be allowed to occur except in carefully controlled conditions, because, uncontrolled, it  
3 destroys objects and kills people. The only way useful and non-destructive electric power  
4 can be produced is by the operation of costly machinery, and the power must be used or  
5 converted to some form of storable energy the moment it is produced. If the electric power  
6 is to be combined with electric power from other sources, it must be endowed with specific  
7 attributes which are, in themselves, costly to maintain. Net metering customers wish the  
8 utility to provide the attributes which they, the customers, cannot provide, and to take their  
9 excess energy, "store" it, and give it back on demand, because they (the customers) cannot  
10 store it. Of course, the utility cannot store it either. The utility must absorb the customer's  
11 excess generation, while managing its generation, transmission, distribution, and control  
12 facilities so that power output equals power demand, voltage equals the standard voltage at  
all points, and frequency equals the standard frequency at all times. Then, when the  
customer wants "the" electric power back, the utility must supply the required power, still  
maintaining all of the required attributes.

13 Even wheat usually costs more at retail than at wholesale, and the reason is that the retailer  
14 must perform costly and valuable services for the retail customers. In the case of wheat,  
15 the services include, probably among others, procurement of the wheat from producers,  
16 distribution of the wheat to convenient retail locations, maintenance of a convenient  
17 facility where the retail consumers can purchase and take possession of the wheat,  
18 controlled storage, so that the wheat will be in merchantable condition when purchased,  
19 and management of inventory, so that appropriate quantities of the wheat are available  
when required by the retail customers.

20 It should not be difficult to understand why electric power, which is technically much more  
21 difficult to distribute to retail consumers than wheat, should be more expensive at retail  
22 than at wholesale, and it should not be difficult to see that the electric power produced by  
23 net metering customers would be worth, *at best*, the value of wholesale power. The very  
24

fact that the customer wants the utility to take the power indicates that it cannot be used when and where it has been produced, and the fact that the customer wishes the utility to take it on the reverse basis from that on which the customer takes power from the utility shows that the utility has no way to control, or even know, when it is coming.

A careful reading of Mr. McKay's comments reveals that he believes that a customer should be able to produce power that equals, on average, the customer's average need for power, requiring the utility to absorb the produced power when it exceeds the required power, and to make up the shortfall when the produced power is less than the required power, while paying nothing for the service. If one customer can do this, there is no reason why all customers would not be able to do it, thus leaving utilities providing services that require basically all of the assets required to provide all requirements retail service but receiving no revenue at all. One wonders whom Mr. McKay expects to step up and pay the cost of all of the utility assets.

2. "Under existing federal law (PURPA, Section 210) utility customers can use the electricity they generate with a wind turbine to supply their own lights and appliances, offsetting electricity they would otherwise have to purchase from the utility at the retail price."

Customers are always free to generate their own electric power, but PURPA does not require utilities to allow customers to power the same devices with utility power and with customer generated power. In general, customers must choose one or the other. PURPA does require utilities to purchase customer generated power for what it is actually worth, which is, by definition, avoided cost. Utilities require generating customers to meter the power they generate separately from the power they take for a good and obvious reason: the customer generated power is worth only a fraction of the value of the utility supplied power.

3. **"Why is net metering important?" (Second Page)**

1 In this paragraph, Mr. McKay explains essentially that net metering is important because it  
2 shifts significant costs from the net metering customer to the utility. That is certainly good  
3 for the net metering customer, but the Commission is obligated to be fair to both the  
4 utilities and the customers. If the Commission is to meet its obligation to the utilities, it  
5 can allow the cost shifts caused by net metering only if it allows the utility to recover the  
6 shifted costs from other customers. This is inconsistent with the rates and service  
7 discrimination statutes of the State of Alaska.

8 **4. "What are the benefits and costs of net metering?" (Second Page)**

9 In the four paragraphs under this heading, Mr. McKay argues that (1) the benefits of net  
10 metering are that the cost of separately measuring and accounting for the output of the  
11 customer's generation is avoided, and (2) the only cost of net metering is that the utility  
12 loses revenue. The assertion on cost (2) can be dismissed, because loss of revenue from  
13 the customer to the utility is clearly not a cost, it is a transfer. The revenue is also not lost  
14 to the utility, it is made up by the other utility customers<sup>3</sup>. ML&P has argued elsewhere  
15 that such a transfer of cost from one set of customers to another should not be allowed by  
16 the Commission.

17 The assertion on benefits (1) is, of course, true, but associated with the benefit of avoiding  
18 the cost of measurement is the loss of the benefits of measurement. The same benefits that  
19 are here claimed for the abandonment of measurement of customer produced power can  
20 also be claimed for the abandonment of measurement of power supplied to the customer.  
21 Utilities the size of ML&P could save millions of dollars per year if they stopped metering  
22 power, and those savings would translate into lower (in the aggregate) customer utility

---

23 <sup>3</sup> It is sometimes claimed that utilities are opposed to net metering because it costs the utilities revenue.  
24 Except in the very short run, the revenue recovery lost through net metering will be recovered from other  
25 customers, so the utility is indifferent. The losers are the customers picking up the transferred costs, and the  
26 customers picking up the real costs that are caused by the misallocation of resources resulting from the price  
distortion.

1 bills for any given (in the aggregate) level of service. The objection to such a plan, other  
2 than its fundamental lack of fairness, is that it would make electric power a free (from the  
3 consumer's point of view) good, and both experience and economic theory tell us that  
4 costly goods that are treated as free by their consumers are wasted.

5 The same thing would occur, at admittedly smaller scale, with net metering. The costly  
6 power management and distribution services that the utility would be required to provide  
7 to the net metering customers free of charge would be treated as free goods and wasted by  
8 those customers. The waste would come in the form of uneconomic investment in  
9 distributed generation resources that would cost more than the value of their output, to the  
10 detriment of all customers except those taking advantage of the net metering service. If it  
11 happened that all customers participated in net metering, the excess of costs over benefits  
12 would be distributed to all customers, and all, or the vast majority, would be worse off.

13 It is actually likely that something very different would happen. Faced with widespread  
14 net metering, utilities would probably be prudent to unbundle their rates to the extent  
15 necessary to eliminate the cross subsidies inherent in net metering with bundled rates. This  
16 would significantly *increase* the metering and administrative costs incurred by utilities,  
17 although it could be argued that the efficiency benefits that would be gained from the more  
18 accurate rates and more sophisticated metering might be worth the extra cost.

19 Finally, still with regard to the alleged benefit, ML&P does not believe that the savings per  
20 net metering customer would exceed, or even approach, \$25 per month. ML&P notes that  
21 its customer charge, which is intended to recover roughly the same costs as would be  
22 avoided for self generators by net metering, is \$6.56 per month for residential rate payers  
23 and \$12.88 per month for small commercial rate payers. Only the large commercial rate  
24 schedules have customer charge rates above \$25 per month. It is certainly possible that  
25 ML&P's customer charges will increase at its next general rate case, but it seems unlikely  
26 that the avoidable costs could exceed \$25 per month for the average net metering  
customer.

5. **Barriers** (third page)

1 The final substantive point in Mr. McKay's comments is a list of barriers currently faced  
2 by a customer wishing to install generation connected to the utility grid. ML&P would  
3 respond that there are significant costs associated with connecting generation to a utility's  
4 grid, and transferring these costs away from the person seeking to benefit by the  
5 connection does not eliminate them: it simply forces somebody else to pay for them. The  
6 three requirements complained of in Mr. McKay's comments do not appear unreasonably  
7 burdensome to ML&P.

8 As argued above, ML&P believes that the output of the customer's generator should be  
9 separately metered, because it is a significantly different product from the all requirements  
10 retail electric service provided by utilities to their customers and measured by the existing  
11 meter. The output of distributed generators should be purchased at a lower than retail rate  
12 because the output is significantly less valuable than retail service. In fact, without  
13 services provided by the utility, it has almost no value. Even the maximum value to the  
14 utility, which is not necessarily the appropriate price, would generally be less than what  
15 would normally be considered a wholesale value for requirements service. Avoided cost  
16 regulations recognize this, and seek to set the price at the maximum value of the output to  
17 the utility. This practice already reserves all of the net benefit of the transaction to the  
18 selling party and none to the purchasing parties (ultimately, the customers of the utility).  
19 To go any further than that would result in outright subsidy, paid by all of the utility's  
20 customers to the net metering customers. To ML&P this seems clearly inappropriate.

21 Finally, ML&P does not regard a requirement to carry adequate insurance (or other proof  
22 of financial responsibility) to be unreasonable. Generation of electric power is a  
23 significantly dangerous activity, and if the person undertaking the activity is not able to  
24 pay the cost of accidents that might occur, someone else will end up paying it.




**Final Thought on Net Metering**

1 In its initial comments, ML&P stated that net metering could be made acceptable if it were  
2 offered only in special rate schedules designed to be appropriate for customers owning  
3 generation, and separate from the rate schedules available to customers not owning  
4 generation. The solution can be made more general by total, or close to total, rate  
5 unbundling. If all of the rates for service are unbundled sufficiently, net metering will  
6 compensate customer owned generators only for the actual value of their output. The  
7 relevant question would be, is the cost of such a thorough unbundling of all rates  
8 (including, most notably, residential and small commercial), and conversion to the smart  
9 metering necessary to support such unbundling, justified by whatever benefits are expected  
10 from net metering?

11  
12 RESPECTFULLY SUBMITTED this 27th day of November, 2006, at  
13 Anchorage, Alaska.

14 Municipality of Anchorage  
15 d/b/a Municipal Light & Power

16   
17 Daniel B Helmick, Manager  
18 Regulatory Affairs  
19  
20  
21  
22  
23  
24  
25  
26

REPLY COMMENTS OF THE MUNICIPALITY OF ANCHORAGE  
D/B/A MUNICIPAL LIGHT AND POWER  
Docket U-06-5  
Page 17 of 17